

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Request of PTC-220, LLC for Waivers of)	WT Docket No. 13-59
Sections 90.729(b) and 90.723(f) of the)	
Commission's Rules)	

To: Chief, Wireless Telecommunications Bureau

Ex Parte Comments

Dixie Electric Membership Corporation, Inc. (õDEMCOö), and Berkeley Electric Cooperative, Inc. (õBECö) (jointly the õUtilitiesö) hereby file these ex parte comments in response to the Request for Waivers of Section 90.729 (b) and 90.723 (f) of the Commission's Rules filed by PTC-220, LLC (PTC-220) in the above-captioned proceeding.¹ As critical infrastructure industry users with current operations in the 221-222 MHz Band and a continuing need for scarce spectrum to serve the vital needs of the public during times of emergency such as Hurricane Katrina, the Utilities oppose PTC-220's waiver request as an unlawful evisceration of the rules by waiver. In light of the important requirements for use of the band by critical infrastructure users, the Utilities support the call by the National Rural Telecommunications Cooperative (õNRTCö) for a comprehensive rulemaking to address all spectrum issues in the band and to develop a band plan that addresses the needs of all critical infrastructure users.²

¹ Public Notice, *The Wireless Telecommunications Bureau and the Office of Engineering and Technology Seek Comment on Waiver to Facilitate Deployment of Positive Train Control Systems*, WT Docket No. 13-59 (rel. Mar. 8, 2013) (õPublic Noticeö).

² Comments of the National Rural Telecommunications Cooperative, WT Docket No. 13-59, filed April 8, 2013, at p. 12-13. (õNRTC Commentsö)

1. The Utilities Have Important Needs for Scarce Spectrum

DEMCO is a rural electric cooperative providing electric service to more than 101,000 locations throughout seven rural parishes, counties, in Louisiana. DEMCO's electric distribution system includes 10 metering points for wholesale power and 40 substations for system reliability. The electric system is continuously monitored by its SCADA system to detect system failures. DEMCO maintains over 9,714 miles of energized lines: 230 miles of transmission facilities, 6,662 miles of overhead construction and 2,822 miles of underground cable. The DEMCO region served as a staging area during Hurricanes Katrina, Gustav and Isaac, providing assistance to many federal and state agencies, and also experienced a severe level of destruction from these storms. The region remains a high risk zone for weather emergencies. In addition it has been DEMCO's experience that during severe weather events, commercial communication providers are often down and unavailable due to infrastructure damage resulting from severe weather.

To date, DEMCO has spent millions of dollars on licensing and equipment for operations on 220 MHz spectrum. Nevertheless, spectrum remains scarce. DEMCO's existing channels do not provide enough capacity for emergency operations even during small outages. When power outages occur as a result of inclement weather conditions or natural or manmade disasters, sometimes leaving thousands or tens of thousands of people without power, restoring power to every person, home, hospital, care center, government office and place of business is a public safety emergency. During such emergency operations DEMCO's workforce, which under normal operations has about 220 employees, will increase in size by an additional 600 to 2600 workers, depending on the size of the emergency. Maintaining reliable and secure communications during such emergency response conditions is of ultimate importance to the safety of DEMCO's work force and customers. It is at those very times that commercial

communications alternatives become unavailable due to outages of the commercial grade networks. As a result, DEMCO is in constant search of additional spectrum, including valuable spectrum in the 220 MHz band.

BEC is a rural electric cooperative providing electric service to more than 84,000 locations throughout three counties in South Carolina covering approximately 80 square miles. BEC is the largest electric cooperative in South Carolina. BEC's electric distribution system includes 2 metering points for wholesale power and 30 substations for system reliability. The electric system is continuously monitored by its SCADA system to detect system failures. In 2012, BEC maintained over 5,304 miles of energized lines: 2,986 miles of overhead construction and 2,318 miles of underground cable. This region is a high risk area for weather emergencies.

BEC took a financial risk by participating in the 1998 auction of the 220 MHz band. The small selection of vendors and spectrum channel arrangement made development of the spectrum uncertain at the time of the auction. BEC has taken the frequencies and developed them into a trunked radio system and a distribution SCADA system. BEC relies heavily on 220 MHz systems, knowing that under the existing licensing rules interference is a low risk. The frequency coordination required for other users of 220 MHz band means BEC will have protection and advanced warning of nearby users on the 220 MHz channels. BEC strongly objects to the waiver request by PTC-220 concerning antenna height, power output, and frequency coordination.

2. PTC-220's Waiver Request Would Unlawfully Eviscerate the Rule

The Utilities oppose PTC-220's waiver request that would effectively amend the rules to allow PTC-220 and other users of the band to exceed the antenna height and effective radiated power limits in Section 90.723(b) and avoid the coordination requirements now contained in

90.723(f) of the Commission's rules. The Utilities support a comprehensive rulemaking as proposed by NRTC to carefully address all spectrum issues and to develop a band plan that will be acceptable to the vital spectrum needs of the entire critical infrastructure industry.

In its Waiver Request, PTC-220 asks that the Commission increase power limits on a nationwide wide basis for all 221 MHz channels while eliminating the protection of coordination now afforded adjacent channel and co-channel users.³ PTC-220 admits that current coordination rules are "about avoiding interference with hundreds of licensees across the country."⁴ It further acknowledges that "a single PTC base station could require coordination with multiple licensees."⁵ Without any rational understanding of the locations or incumbents involved, many of whom are critical infrastructure entities, PTC-220 seeks to have the Commission inappropriately re-write its interference protection rules in the context of a waiver request. PTC-220's request is far too broad and cannot be authorized by the Commission through the waiver process.

Any applicant for waiver of an agency rule faces a "high hurdle" when seeking to avoid the proscription of a generally applicable determination.⁶ It is well established that "[t]he function of a waiver is not to change the general standard, a matter for which the opportunity for general comment is a prerequisite under the Administrative Procedure Act." ⁷ It is further accepted that a "waiver will not be so broad as to eviscerate the rule. Rather the waiver must be

³ Request of PTC-220, LLC for Waivers of Sections 90.729(b) and 90.723(f) of the Commission's Rules, WT Docket No. 13-59, filed February 1, 2013.

⁴ *Id.*, at 9.

⁵ *Id.*

⁶ *WAIT Radio v. FCC*, 418 F. 2d 1153, 1157 (D.C. Cir. 1969).

⁷ *Authority to Construct and Operate an Automated Maritime Telecom. System*, 3 FCC Rcd 4690, 4692 (1988). *See also Am. Trucking Ass'n, Inc. v. FHA*, 51 F.3d 405, 414 (4th Cir. 1995).

tailored to the specific contours of the exceptional circumstances.ö⁸ PTC-220's blunt shot-gun approach is not so tailored. Its broad nationwide request would unlawfully eviscerate the existing interference protection rules designed to protect hundreds of incumbent users of the spectrum, without due process protections and cannot be granted in the context of a waiver.

Moreover, as demonstrated by NRTC, the proposed power limits under the waiver will cause interference with existing stations as well as limit the expansion of future operations by incumbent licensees.⁹ These incumbents are entitled to the existing lawfully promulgated interference protections. A waiver is simply inappropriate where, as here, it will lead to interference to lawfully licensed stations.¹⁰ In denying waiver of its technical rules that would have allowed overlap with the contour of another station, the Commission explained, "While the Commission has and will, when sufficient justification is proposed, allow an existing *1* station to receive prohibited overlap when improving the station's facilities, Spirit has provided no precedent in which the staff has permitted such stations to *cause* prohibited overlap, and we are aware of none." Spirit's argument, if accepted, would eviscerate the rule, *viz.*, establishing that a *1* waiver is warranted in circumstances where spectrum congestion prevents the licensing of a rule-compliant station proposal.ö¹¹

In the context of life-saving operations, interference to *either* a utility or a railroad could be disastrous. In light of the critical life safety issues at stake, even the *potential* for interference is too great a risk for the Commission to tolerate on the paucity of the existing record.

⁸ *AMERICAN TELEPHONE AND TELEGRAPH COMPANY, Petition for waiver of Section 64.702 of the Commission's Rules and Regulations, Memorandum Opinion and Order*, 88 F.C.C. 2d 1, at ¶ 15 (1981).

⁹ NRTC Comments, at p. 8-9 and Appendix II.

¹⁰ *See Spirit Radio of North Florida, Inc.*, 24 FCC Rcd 2958, (2009).

¹¹ *Id.* at 2961 (Emphasis added).

Development of a full and complete record, including a complete analysis of technical and interference issues arising from the sweeping rule changes PTC-220 requests must be undertaken before any Commission action. This can only be done in the context of a full rulemaking proceeding as required by the Administrative Procedure Act. Accordingly, the PTC-220 waiver request must be denied.

3. The Commission Should Begin a Rulemaking Addressing A Band Plan

While PTC-220 and other railroads have legitimate and important needs to develop a PTC system for train safety pursuant to an Act of Congress, they have no superior claim to the 220 MHz spectrum. Congress did not provide the railroads with any special rights to this band.¹² In order to best serve the public interest the Commission should commence a comprehensive rulemaking that takes into account the important spectrum needs of the entire critical infrastructure industry in the adoption of any band plan for the 220 MHz spectrum.

Electric utilities are dependent on this spectrum to increase system automation, reliability, safety and efficiency. With support from the Commission and others in the federal government, electric utilities across the country are implementing smart grid and other advanced communications systems and are becoming progressively more dependent on automation to provide critical services. The federal government has invested billions of dollars in utilities and others to aid in smart grid deployment.¹³ The Commission has held workshops focusing on

¹² This is in contrast to recent legislation whereby Congress did mandate the use of 700 MHz spectrum specifically for public service entities and the deployment of a broadband public safety network. *Middle Class Tax Relief and Job Creation Act of 2012*, Pub. L. No. 112-96, 126 Stat. 156 (2012).

¹³ See *President Obama Announces \$3.4 Billion Investment to Spur Transition to Smart Energy Grid*, available at <http://www.energy.gov/8216.htm>.

smart grid deployment,¹⁴ and federal smart grid loans and grants have been awarded throughout the country. Spectrum is a key component in developing, deploying and operating these systems.

Available spectrum for use by electric utilities at 220 MHz is also consistent with Federal homeland security objectives.¹⁵ The continued ability to provide core energy services to the public, as well as to the hundreds of federal, state, and municipal government entities, is essential to the public interest. These communications systems must remain reliable and secure, especially during emergencies when public safety is affected.

Moreover, the Commission has consistently recognized the similar needs of railroads and other critical infrastructure entities for access to vital spectrum necessary to support their operations and thereby protect safety of life and property. From the standpoint of spectrum requirements, the needs of electric utilities, oil and gas companies and railroads are virtually indistinguishable in prior Commission decisions. In adopting rules implementing Sections 309(j) and 337 of the Communications Act the Commission grouped these entities together, recognizing that “Congress deemed utilities, railroads, metropolitan transit systems and

¹⁴ For example, as the Commission was preparing the National Broadband Plan, it held a three-hour workshop on August 25, 2009, to discuss Smart Grid, Broadband and Climate change. *See also Comment Sought on the Implementation of Smart Grid Technology*, Public Notice, DA 09-2017 (rel. Sept. 4, 2009).

¹⁵ An Executive Order establishing a Critical Infrastructure Protection Board following the events of September 11, 2001 recognized the need to protect critical infrastructure. The Executive Order noted that the “protection of these systems is essential to the telecommunications, **energy**, financial services, manufacturing, water, transportation, health care, and emergency services sectors.” Executive Order, President George W. Bush through the Office of the White House Press Secretary, Critical Infrastructure Protection in the Information Age (Oct. 16, 2001), at Section 1(a) (emphasis added).

*pipelines to be entities that protect the safety of life, health, or property for purposes of public safety radio services.*¹⁶

In establishing service rules for the 4.9 GHz band, the Commission again noted *“utilities, railroads, and similar entities may be directly involved in an emergency and may need to interact with the traditional public safety service providers.”*¹⁷ Reiterating the similarity of the *“power, petroleum and railroad industries”* the Commission observed *“the nature of their day-to-day operations provides little or no margin for error and in emergencies they can take on an almost quasi-public safety function. Any failure in their ability to communicate by radio could have severe consequences on the public welfare.”*¹⁸

In sum, grant of PTC-220’s waiver request could have far reaching consequences on other users of the spectrum, many of whom are critical infrastructure companies essential to national security and emergency communication responses. In light of the importance of this band to the operations of these critical infrastructure users, the Utilities support the commencement of a comprehensive rulemaking to address all spectrum issues and to develop a band plan that addresses the needs of all critical infrastructure users.

¹⁶ *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Safety Radio Pool in the Private Mobile Frequencies Below 800 MHz; Petition for Rule making of the Mobile Telecommunications Association, WT Docket No. 99-87, Report And Order And Further Notice Of Proposed Rulemaking, 15 FCC Rcd 22709, at ¶ 80 (2000), emphasis added.*

¹⁷ *The 4.9 GHz Band Transferred from Federal Government Use, WT Docket No. 00-32, Memorandum Opinion and Order and Third Report and Order, 18 FCC Rcd 9152, at ¶ 22 (2003), emphasis added.*

¹⁸ *Id.*

Conclusion

In view of the foregoing, the Utilities respectfully request that the Commission deny the PTC-220 waiver request. The Utilities support the commencement of a comprehensive rulemaking reviewing all the spectrum issues of the 220 MHz band in order to develop a band plan that addresses the vital communications needs of all critical infrastructure users.

Respectfully Submitted,

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